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REMARKS

The present response is intended to be fully responsive to all points of objection and/or rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

Applicants assert that the present invention is new, non-obvious and useful. Prompt consideration and allowance of the claims is respectfully requested.

Status of Claims

Claims 1-6 and 8-41 are pending in the application.

Claims 1-6 and 8-41 have been rejected.

Claims 1 and 32 have been amended. The amendments to the claims add no new matter.

CLAIM REJECTIONS

35 U.S.C. § 103 Rejections

In the Office Action, the Examiner rejected claims 1-3, 6-13, 15-16, 22-24, 26-32, 34-36 and 38-40 under 35 U.S.C. § 103(a), as being unpatentable over Taniguchi et al. (US 6,366,291) in view of Hill et al. (US 6,243,070).

Applicants respectfully traverse the rejection of claims 1-3, 6-13, 15-16, 22-24, 26-32, 34-36 and 38-40 under 35 U.S.C. § 103(a).

As stated by the Examiner, Taniguchi does not explicitly teach using conversion operation dependent on one or more of the intensity values of at least one of the first and second primary color component.

Hill cannot cure the deficiencies of Taniguchi. Hill teaches

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The processing implemented in sub-routine 970 serves to identify pixels which are likely to distract as those for which one of the red or green pixel sub-components is bright and the other is not. Suppression of the color artifact is achieved in the sub-routine 970 by decreasing the luminance intensity value of the brighter of the red or green pixel sub-components and increasing the luminance intensity value of the dimmer of the red or green pixel sub-components (Hill, column 21, lines 33-40)

Therefore, Hill teaches eliminating artifacts by bringing the intensity values of the red and green sub-pixels closer. Hill does not teach or suggest correcting a chromaticity of a primary color component of the pixel, said conversion operator dependent on one or more of the intensity values of at least one of the first and second primary color components, as recited in claims 1 and 32.

The pending claims, however, recite correction of chromaticity distortions in the displayed colors which result from dependency of the chromaticity of primary color components on their intensity. Particularly, the present application discloses:

The conversion in Equation 2 assumes that the chromaticity of the display primaries is fixed, e.g., as in a CRT display, and that the change in the relative intensity of the primary does not influence the displayed chromaticity. However, as discussed above, this is not the case for LC displays, wherein the chromaticity of the primaries may vary significantly with intensity. Thus, the use of a fixed inverse conversion matrix to convert from XYZ values into RGB values would result in distortion of the colors displayed by the LC display.

According to embodiments of the invention, this problem may be solved by using an inverse conversion matrix including elements, which are dependent on the intensity values of the primary color components. This may be achieved, for example, by mapping the XYZ values of each of the primary colors as a function of its intensity, as described below. (para. [0031] – [0032], emphasis added)

Therefore, neither Taniguchi nor Hill, alone or in combination, teach or suggest, "A method of selectively adjusting colors displayed by a color display, the method comprising adjusting an intensity value of a first primary color component of a pixel based, at least in part, on an intensity value of a second primary color component of said pixel, wherein said adjusting comprises calculating an adjusted intensity value for said first primary color

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component using a conversion operator to correct a chromaticity of a primary color component of the pixel, said conversion operator dependent on one or more of the intensity values of at least one of the first and second primary color components", as recited in amended independent claim 1. Moreover, It would not have been obvious to include "calculating an adjusted intensity value for said first primary color component using a conversion operator to correct a chromaticity of a primary color component of the pixel, said conversion operator dependent on one or more of the intensity values of at least one of the first and second primary color components" in Hill because Hill discusses only reducing artifacts, not correcting chromaticity. Thus, neither Taniguchi nor Hill, alone or in combination, teaches the invention of claim 1. Accordingly, amended independent claim 1 is allowable.

Claims 1-3, 6-13, 15-16, 22-24, 26-31 depend from, directly or indirectly, claim 1, and therefore include all the limitations of this claim. At least for this reason claims 1-3, 6-13, 15-16, 22-24, 26-31 are likewise allowable. Accordingly, Applicants respectfully request that the Examiner withdraw the rejections to amended independent claim 1 and to claims 1-3, 6-13, 15-16, 22-24, 26-31 dependent thereon.

Regarding claim 32, for the reasons set forth above, neither Taniguchi nor Hill, alone or in combination, teach or suggest, "a color adjustment unit to selectively adjust an intensity value of a first primary color component of a pixel based, at least in part, exclusively on an intensity value of a second primary color component of said pixel and on a conversion operator to correct a chromaticity of a primary color component of the pixel, said conversion operator dependent on one or more of the intensity values of at least one of the first and second primary color components", as recited in amended independent claim 32. Moreover, It would not have been obvious to include "a conversion operator to correct a chromaticity of a primary color component of the pixel, said conversion operator dependent on one or more of the intensity values of at least one of the first and second primary color components" in Hill. Thus, neither Taniguchi nor Hill, alone or in combination, teaches the invention of claim 32. Accordingly, amended independent claim 32 is allowable.

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Claims 34-36 and 38-40 depend from, directly or indirectly, claim 32, and therefore include all the limitations of this claim. At least for this reason claims 34-36 and 38-40 are likewise allowable. Accordingly, Applicants respectfully request that the Examiner withdraw the rejections to amended independent claim 32 and to claims 34-36 and 38-40 dependent thereon.

In the Office Action, the Examiner rejected claims 4, 5 and 33 under 35 U.S.C. § 103(a), as being unpatentable over Taniguchi et al. in view of Hill et al. and further in view of Childs et al. (GB 2,282,928).

Applicants respectfully traverse the rejection of claims 4, 5 and 33 under 35 U.S.C. § 103(a).

Claims 4, 5 and 33 depend from claims 1 and 32, and therefore include all the limitations of those claims. Claims 1 and 32 are allowable over Taniguchi et al. in view of Hill et al. and Childs et al. do not cure the deficiencies of Taniguchi et al. in view of Hill et al. At least for this reason claims 4, 5 and 33 are likewise allowable. Accordingly, Applicants respectfully request that the Examiner withdraw the rejections to claims 4, 5 and 33.

In the Office Action, the Examiner rejected claims 17, 25, 37 and 41 under 35 U.S.C. § 103(a), as being unpatentable over Taniguchi et al. in view of Hill et al. and further in view of Lin (US 6,160,644).

Applicants respectfully traverse the rejection of claims 17, 25, 37 and 41 under 35 U.S.C. § 103(a).

Claims 17, 25, 37 and 41 depend from claims 1 and 32, and therefore include all the limitations of those claims. Claims 1 and 32 are allowable over Taniguchi et al. in view of Hill et al. and Lin does not cure the deficiencies of Taniguchi et al. in view of Hill et al. At least for this reason, claims 17, 25, 37 and 41 are likewise allowable. Accordingly, Applicants respectfully request that the Examiner withdraw the rejections to claims 17, 25, 37 and 41.

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In the Office Action, the Examiner rejected claims 14 under 35 U.S.C. § 103(a), as being unpatentable over Taniguchi et al. in view of Hill et al. and further in view of Tanner et al. (US 6,496,160).

Applicants respectfully traverse the rejection of claim 14 under 35 U.S.C. § 103(a).

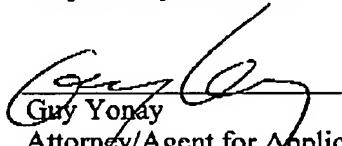
Claim 14 depends from claim 1 and therefore includes all the limitations of this claim. Claim 1 is allowable over Taniguchi et al. in view of Hill et al. and Tanner does not cure the deficiencies of Taniguchi et al. in view of Hill et al. At least for this reason claim 14 is likewise allowable. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection to claim 14.

In view of the foregoing amendments and remarks, the pending claims are deemed to be allowable. Their favorable reconsideration and allowance is respectfully requested.

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

Please charge any fees associated with this paper to deposit account No. 50-3355.

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